

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An image forming apparatus comprising:
a main body of the image forming apparatus;
a reversing automatic document feeder that is provided on an upper part of the main body of the image forming apparatus;
a wireless LAN module that is provided inside a rear surface of the main body of the image forming apparatus;
two antennas that are provided on the rear surface of the main body of the image forming apparatus; and
a cable that connects the wireless LAN module and the two antennas with a shortest distance,
wherein the two antennas are disposed at positions where a first of the two antennas compensates for degradation in radiation characteristics of a second of the two antennas caused by the reversing automatic document feeder.
2. (Original). The image forming apparatus according to claim 1, wherein the wireless LAN module is provided on a control board that is disposed inside the rear surface of the main body of the image forming apparatus.
3. (Previously Presented) The image forming apparatus according to claim 1, wherein the two antennas respectively comprise a main antenna and a sub-antenna.
4. (Previously Presented) The image forming apparatus according to claim 1, wherein the two antennas each comprise a dual-band antenna.
5. (Withdrawn) An image forming apparatus with an automatic document feeder, comprising: a wireless LAN module that is provided inside a rear surface of a main body of the image forming apparatus; and an uppermost part of an antenna that is connected to the wireless LAN module and is provided on the rear surface of the main body of the image

forming apparatus, the uppermost part of the antenna being located at a position higher than a predetermined position relative to an uppermost part of the automatic document feeder.

6. (Withdrawn) The image forming apparatus according to claim 5, wherein the uppermost part of the antenna is located at a position higher than a position that is lower by 1 cm than the uppermost part of the automatic document feeder.

7. (Withdrawn) An image forming apparatus with an automatic document feeder, comprising: a wireless LAN module that is provided inside a rear surface of a main body of the image forming apparatus; a main antenna that is connected to the wireless LAN module and is provided on the rear surface of the main body of the image forming apparatus, the main antenna being located at a position where optimal radiation characteristics are obtained in consideration of the presence of the automatic document feeder that is an obstacle to a front side of the image forming apparatus; and a sub-antenna that is connected to the wireless LAN module and is provided on the rear surface of the main body of the image forming apparatus.

8. (Withdrawn) The image forming apparatus according to claim 7, wherein an uppermost part of the main antenna is provided on that part of the rear surface of the image forming apparatus, which corresponds to a right side of the front surface of the image forming apparatus, at a position that is lower by 1 cm than an uppermost part of the automatic document feeder.

9. (Withdrawn) The image forming apparatus according to claim 7, wherein the sub-antenna is provided at such a position as to compensate a degraded portion of radiation characteristics of the main antenna.

10. (Withdrawn) The image forming apparatus according to claim 7, wherein an uppermost part of the sub-antenna is provided on that part of the rear surface of the image forming apparatus, which corresponds to a left side of the front surface of the image forming apparatus, at a position that is lower by 1 cm than an uppermost part of the automatic document feeder.

11. (Withdrawn) The image forming apparatus according to claim 7, further comprising an antenna for Bluetooth, which is disposed between the main antenna and the sub-antenna, with a predetermined distance from the main antenna and a predetermined distance from the sub-antenna.

12. (Withdrawn) The image forming apparatus according to claim 11, wherein the antenna for Bluetooth is disposed with a distance of 200 mm or more from the main antenna and with a distance of 200 mm or more from the sub-antenna.

13. (Previously Presented) The image forming apparatus according to claim 1, wherein the rear surface of the main body is perpendicular to a ground surface upon which the image forming apparatus sits.

14. (New) The image forming apparatus according to claim 1, wherein the radiation characteristics are horizontal radiation characteristics.

15. (New) The image forming apparatus according to claim 14, wherein the two antennas are respectively arranged on left and right sides of the rear surface of the main body of the image forming apparatus.